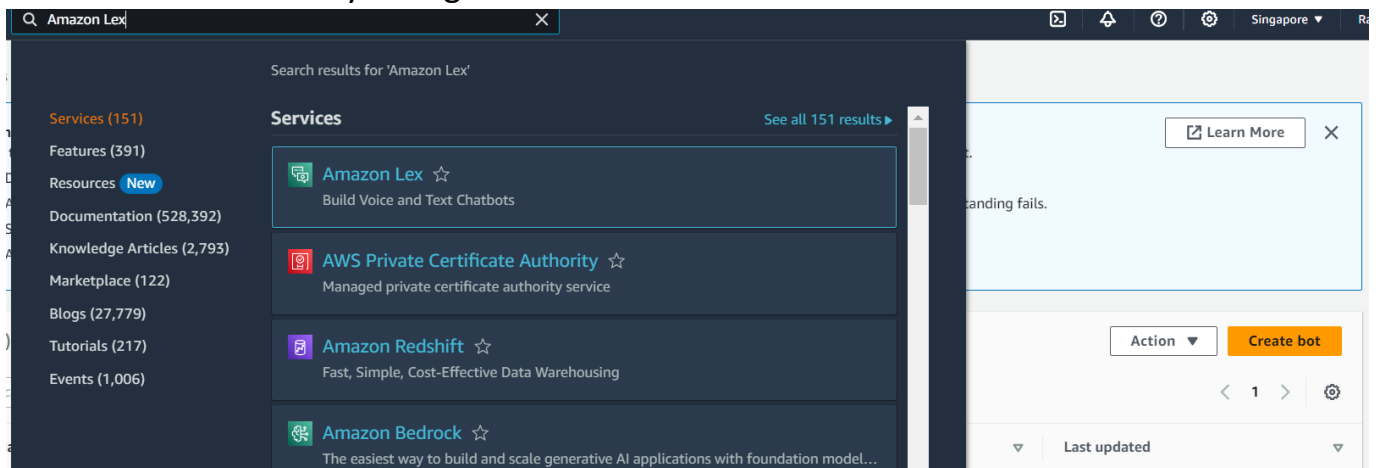


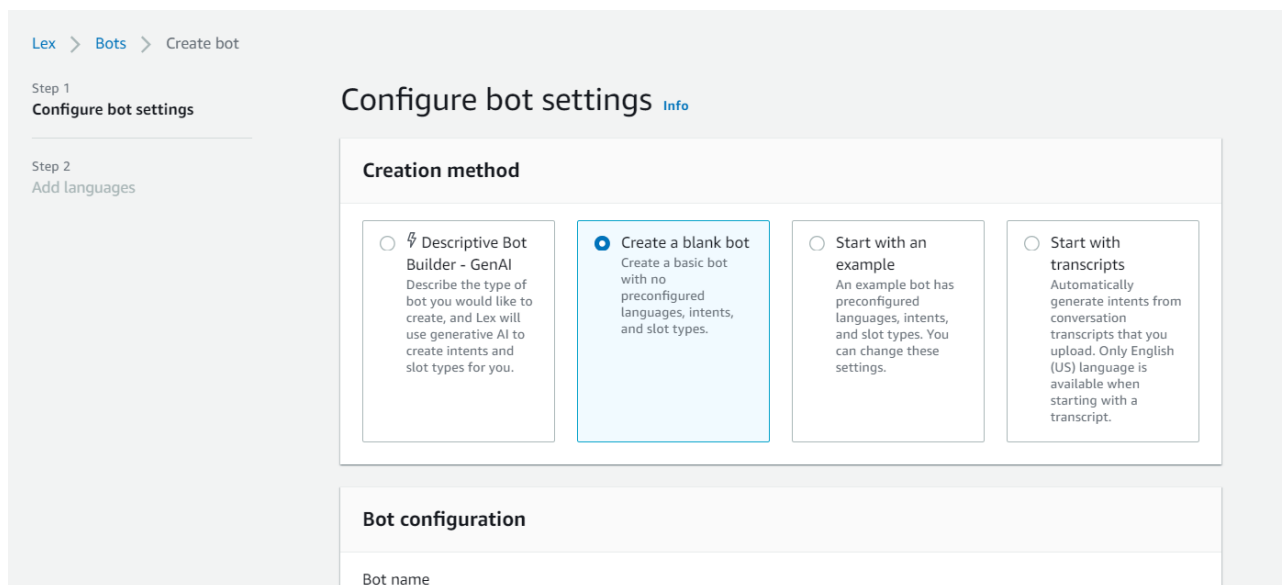
Building a chat bot for a Pizza center

Steps to build a Chat Bot using Amazon Lex –

1. Go to console – search for **Amazon Lex** and click it
2. Click on **create bot** on your right side and launch



- 3.
4. Configure bot settings-
 - Creation method – select on **create a blank bot**



- Bot Configuration –
 - Name – **OrderPizza**
 - Description – default / specify this – **This bot helps in ordering the pizza**
- IAM permissions – select **create a role with basic Amazon Lex Permissions**

Bot configuration

Bot name

Maximum 100 characters. Valid characters: A-Z, a-z, 0-9, -, _

Description - *optional*

This description appears on bot list page. It can help you identify the purpose of your bot.

Maximum 200 characters.

IAM permissions [Info](#)

IAM roles are used to access other services on your behalf.

Runtime role

Choose a role that defines permissions for your bot. To create a custom role, use the IAM console.

☒ Create a role with basic Amazon Lex permissions.

☐ Use an existing role.

- COPPA – click on **No**
- Idle session time out – default
- Advance settings – default

Children's Online Privacy Protection Act (COPPA) [Info](#)

Is use of your bot subject to the [Children's Online Privacy Protection Act \(COPPA\)](#) [\[?\]?](#)

☐ Yes

☒ No

Idle session timeout

You can configure how long a session is maintained when the user does not provide any input and the session is idle. Amazon Lex retains context information until a session ends.

Session timeout

minute(s)
▼

By default, session duration is 5 minutes, but you can specify any duration between 1 and 1440 minutes (24 hours).

▼ Advanced settings - *optional* [Info](#)

Tags - bot

You can tag the bot with a label. Tags can help you manage, identify, organize, search for, and filter resources.

No tags associated with the resource.

- Click on next – it will redirect you to language setting – verify whether its in **English-US** – If it is default in present ignore and click on **Done** again it will redirect to additional settings - agenda of chat bot

▼
Language: English (US)

Select language

English (US) ▼

Description - optional

Maximum 200 characters.

Voice interaction

The text-to-speech voice that your bot uses to interact with users.

Danielle ▼

Voice sample

Hello, my name is Danielle. Let me know how I can assist you.

Play

Intent classification confidence score threshold

0.40

Min: 0.00, max: 1.00.

Cancel

Add another language

Done

5. Conversation flow – this is to view your settings firstly ignore it (optional)

6. Intent details

- Name – **OrderPizza**
- Description – **this bot helps in ordering pizza**

✔
Successfully created bot: OrderPizza

Draft version ▼

English (US) ▼

Not built

► Conversation flow Info

▼ Intent details Info

Intent name

OrderPizza

Maximum 100 characters. Valid characters: A-Z, a-z, 0-9, -, _

Intent and utterance generation description

Describe the purpose of your intent. This will also be used when generating utterances for your intent.

this bot helps in ordering pizza

Maximum 200 characters.

ID: D62PPXNCGT

7. Contexts- default

8. Sample utternaces- in the text box beneath type 'hi,Hi,Hello,hello, i want to order pizza' and add it for each word using **Add utterance**

9. Initial response – default

10.Slots – default for now

11.Confirmation – toggle to active and by clicking it

- Confirmation prompt- your order details are - {PizzaType} pizza with {PizzaCrust} crust, Appetizers - {Appetizers}
- Decline responses - Your order has been cancelled ! please nudge me if you want to order again ?
- Advance options - default

Confirmation
[Info](#)

☒ Active

Prompts help to clarify whether the user wants to fulfill the intent or cancel it.

▼ Prompts to confirm the intent
 Message: your order details are - {PizzaType} pizza wit...

Responses sent when the user declines the intent
 Message: Your order has been cancelled ! please nudge...

Confirmation prompt
 What will the bot say to prompt the user to confirm this intent.

your order details are - {PizzaType} pizza with {PizzaCrust} crust, Appetizers - {Appetizers}

Decline response
 What will the bot say if the user says NO to the confirmation prompt.

Your order has been cancelled ! please nudge me if you want to order again ?

Advanced options
 Configure confirmation prompts and decline responses.

11.Fulfillment – default

12. Closing response – toggle to active and by clicking it

- Message - Thank you ! {Name}

Closing response
[Info](#)

☒ Active

You can define the response when closing the intent.

▼ Response sent to the user after the intent is fulfilled
 Message: Thank you ! {Name}

Message group
[Info](#)
 You can define a text message group to respond using plain text.

Message

Thank you ! {Name}

► Variations - optional

More response options

 Add custom payloads, SSML, and card groups.

► Set values
 -

Next step in conversation
 End conversation

+ Add conditional branching

Editor
 Visual builder
 [New](#)

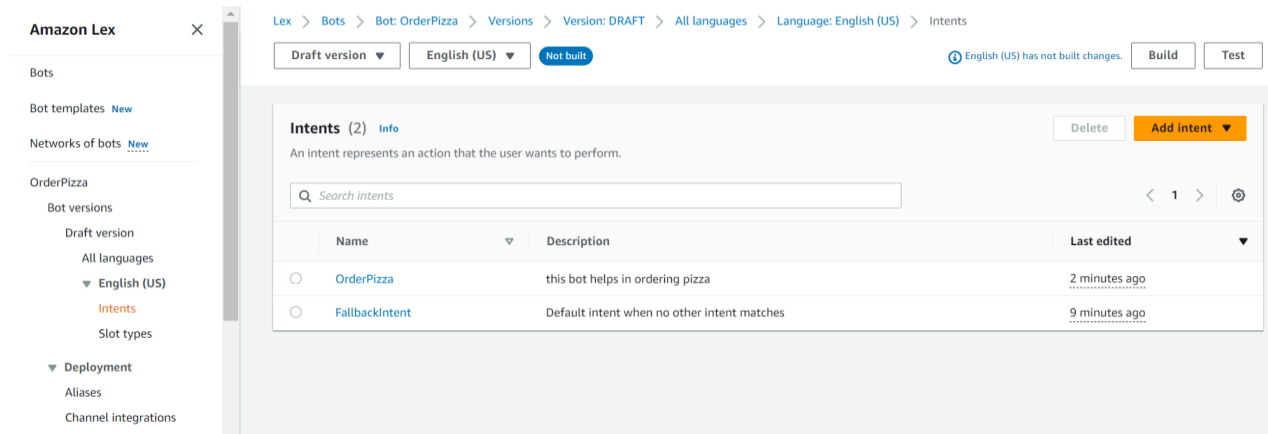
Save intent

More response – if you want to add add more / default

13.Code hooks - default

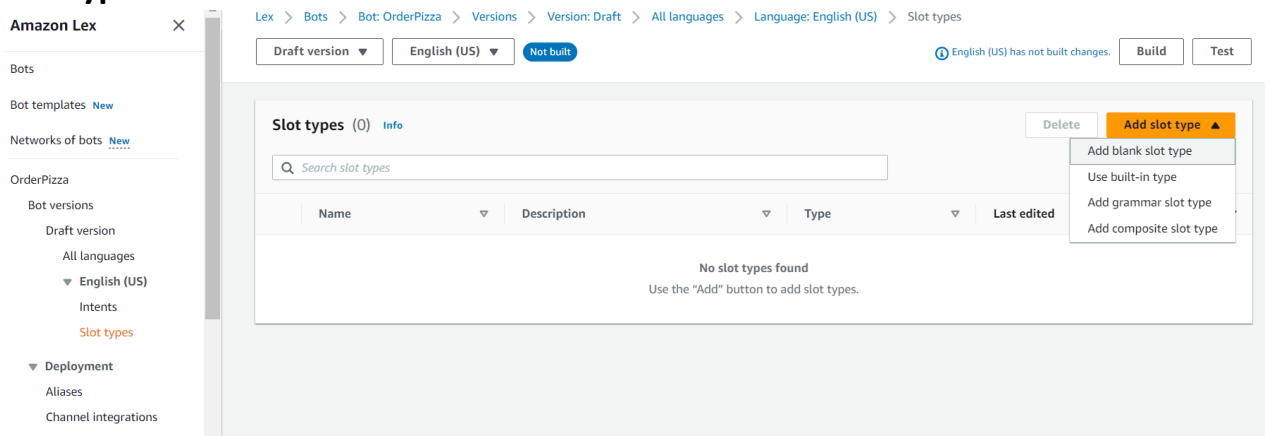
14. Click on save intent

15. Then on your left side you'll find **back to intent lists** click it you will find intentsdashboard – review the intent 'OrderPizza '



16. On your left side you'll find **slot types** click on that

- Click on **add slot type** on your right side – on your drop down select **add blank slot type**



- Name - **PizzaType**
- click on add

The screenshot shows the 'Add blank slot type' dialog box. It has a title bar with a close button. Below the title is the instruction 'Create a custom slot type for your bot.' There is a text input field labeled 'Slot type name' containing the text 'PizzaType'. Below the input field is a note: 'Maximum 100 characters. Valid characters: A-Z, a-z, 0-9, -, _'. At the bottom right are two buttons: 'Cancel' and 'Add'.

- it will redirect u to slot setting – select on **restrict to slot values**

Amazon Lex × Draft version ▼ English (US) ▼ Not built En

[Slot types \(1\)](#)

Sort by last updated ▼

PizzaType Unsaved

Slot type details

Slot value resolution

Amazon Lex resolves the slot values in an utterance to only the values you provide, or it expands the resolution to related or similar values.

☐ Expand values (default)
Values used as training data.
 ☒ Restrict to slot values
Use only values provided.

Slot type values

Modify the list of values used to train the machine learning model to recognize values for a slot.

No slot type values

You haven't added any slot type values yet.

- add values and keys for each value click the value to **add value** on your right side
- value – **Italian** , key – Italian, **italian**
- value – **Mexican** , key – mexican, **Mexican**
- value – **small** , key – **Small** , small
- value – **Medium** , key – **medium** , Medium
- value – **Large** , key – **Large** , large

Slot type values

Modify the list of values used to train the machine learning model to recognize values for a slot.

Italian	Tab or ; or enter return for new value ×
	italian, Italy ×
Mexican	Tab or ; or enter return for new value ×
	Mexican, mexican ×
Small	Tab or ; or enter return for new value ×
	small, Small ×
Medium	Tab or ; or enter return for new value ×
	medium, Medium ×
Large	Tab or ; or enter return for new value ▼

- click on **save slot type** and go back to slots dashboard by clicking on your left side using **slot types**

17. repeat it for 'PizzaCrust'

- Click on **add slot type** on your right side – on your drop down select **add blank**

slot type

Amazon Lex

Slot types (2)

Search

Sort by last updated

PizzaCrust

PizzaType

Draft version English (US) Not built

Amazon Lex resolves the slot values in an utterance to only the values you provide, or it expands the resolution to related or similar values.

☐ Expand values (default)
Values used as training data.

☒ Restrict to slot values
Use only values provided.

Slot type values
Modify the list of values used to train the machine learning model to recognize values for a slot.

Search slot type values

Baked Tab or ; or enter return for new value
thick, Thick, thick crust, Thick Crust

Hand tossed Tab or ; or enter return for new value
Thin, thin, thin crust, Thin Crust

Value Tab or ; or enter return for new value Add value

- Name - **PizzaCrust**
- click on add
- it will redirect u to slot setting – select on **restrict to slot values**
- add values and keys for each value click the value to **add value** on your right side
value – **Baked** , key – **thick , Thick, thick crust, Thick Crust**
value – **Hand tossed** , key – **Thin, thin, thin crust, Thin Crust**
- click on **save slot type** and go back to slots dashboard by clicking on your left side using **slot types**

18. repeat it for 'Appetizers'

- Click on **add slot type** on your right side – on your drop down select **add blank slot type**
- Name - Appetizers
- click on add
- it will redirect u to slot setting – select on **restrict to slot values**
- add values and keys for each value click the value to **add value** on your right side
value – **cake** , key – **choco cake, vanilla cake , cake , strawberry cake**
value – **coke** , key – **coke, cola , cocacola**

Amazon Lex

Slot types (3)

Search

Sort by last updated

Appetizers

PizzaCrust

PizzaType

Draft version English (US) Not built

Slot type values
Modify the list of values used to train the machine learning model to recognize values for a slot.

Search slot type values

cake Tab or ; or enter return for new value
choco cake, vanilla cake, cake, strawberry cake

coke Tab or ; or enter return for new value
coke, cola, cocacola

Value Tab or ; or enter return for new value Add value

Maximum 140 characters. Valid characters: A-Z, a-z, 0-9, @, #, \$

☐ Use slot values as custom vocabulary info

- click on **save slot type** and go back to slots dashboard by clicking on your left side using **slot types**
- go on to intents dashboard on your left side using **intents** and click on **OrderPizza**

Amazon Lex

Bots

Bot templates [New](#)

Networks of bots [New](#)

OrderPizza

Bot versions

Draft version

All languages

English (US)

Intents

Slot types

Deployment

Aliases

Channel integrations

Analytics [New](#)

Overview

Lex > Bots > Bot: OrderPizza > Versions > Version: DRAFT > All languages > Language: English (US) > Intents

Draft version English (US) Not built

English (US) has not built changes. Build Test

Intents (2) Info

An intent represents an action that the user wants to perform.

Search Intents

	Name	Description	Last edited
<input type="radio"/>	OrderPizza	this bot helps in ordering pizza	20 minutes ago
<input type="radio"/>	FallbackIntent	Default intent when no other intent matches	27 minutes ago

19. In the beginning we have skipped step - 9 now we will complete it
click on to add slot –

Amazon Lex

Draft version English (US) Not built

Initial response Info

You can provide messages to acknowledge the user's initial request. You can also configure next step in the conversation and branch based on conditions.

Response to acknowledge the user's request

Message: -

Slots (0) - optional Info

Information that a bot needs to fulfill the intent. The bot prompts for slots required for intent fulfillment, in priority order below.

Filter

You haven't added any slots yet.

Add slot

- name – **Name** , slot type – **Amazon.firstname**
prompt – **Hello ! May I know your name ?**

Add slot

A slot is used to capture information from the user to fulfill the intent.

☒ Required for this intent

The bot will prompt for this slot during the conversation if a value is not provided by the user.

Name Slot type

Name AMAZON.FirstName

Prompts

Hello ! May I know your name ?

Cancel Add

- name – **PizzaType** , slot type – **PizzaType**
prompt – **Welcome to the pizza center {Name}, which pizza would you like to prefer today ?**
- name – **PizzaCrust** , slot type – **PizzaCrust**
prompt – **Sure ! what crust would you like to have in your pizza ?**
- name – **Appetizers** , slot type – **Appetizers**
prompt – **would you like to have cake or coke with your pizza**
- name – **DeliveryTime** , slot type – **Amazon.time**
prompt – **May I know your preferred time for delivery ?**

▼ Prompt for slot: DeliveryTime Slot type AMAZON.Time

Message: May I know your preferred time for delivery ?

☒ Required for this intent
The bot will prompt for this slot during the conversation if a value is not provided by the user.

Name Slot type

DeliveryTime AMAZON.Time

Prompts

May I know your preferred time for delivery ?

You can use the advanced options setting to configure rich messages such as a custom payload, card groups, and SSML.

Advanced options

- Click on that prompt again you will find **advanced settings** in it click that

Slot: DeliveryTime Info

Slot prompts Info

Prompts to elicit the slot.

▼ Bot elicits information

Message: May I know your preferred time for delivery ?

☐ Play the messages in order Info

Messages will be used in the predefined order as slot prompts by your bot.

▼ Message group Info

You can define a text message group to respond using plain text.

Message

May I know your preferred time for delivery ?

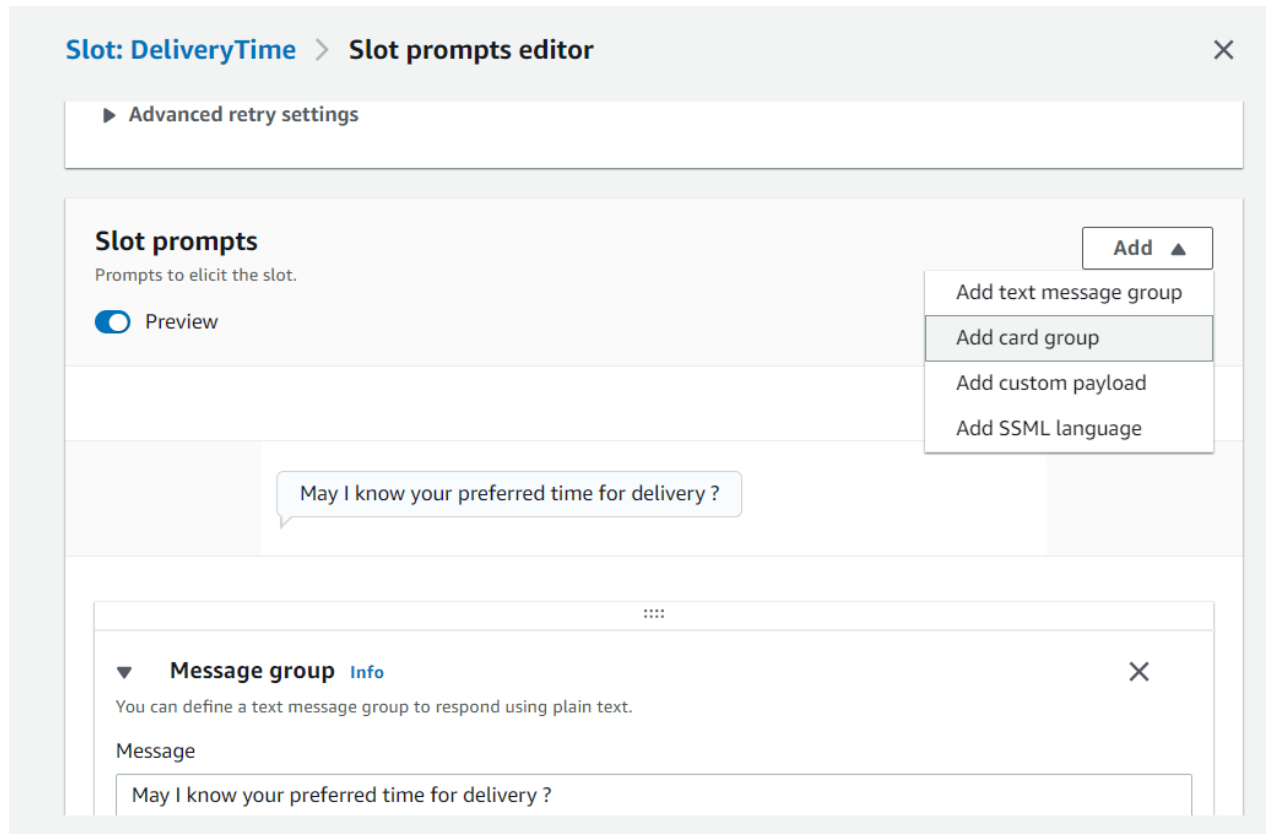
► Variations - optional

More prompt options

Add custom payloads, SSML, and card groups.

- a tab will be opened on your right in that **scroll down to slot prompts** and click it
- you will find **more prompt settings** click on it
- **scroll down to slot prompt, enable preview toggle**

- on the right side of that section you will find **add** button click on that and click on **add card group**



- scroll down to card group section
title : **May I know your preferred time for delivery ?**
subtitle : default
- enable buttons and add button
20:00 - 8 PM
20:30 - 8:30 PM
21:30 - 9.00 PM

Slot: DeliveryTime > Slot prompts editor

Image URL

Must be an Amazon S3 object URL.

Title

Maximum 250 characters. Valid characters: A-Z, a-z, 0-9, @, #, \$

Subtitle

Maximum 250 characters. Valid characters: A-Z, a-z, 0-9, @, #, \$

▼ Buttons - optional

Button 1 title

Button title can have up to 50 characters.

Button 1 value

Button value can have up to 50 characters.

Button 2 title

Button title can have up to 50 characters.

Button 2 value

Button value can have up to 50 characters.

Cancel Update prompts

- Enter the values and keys as it is and you can add more as more as you want
- click on **update prompts** and again click on **update slots** and again **save the intents**

Slot: DeliveryTime > Slot prompts editor

Button 1 title

Button title can have up to 50 characters.

Button 1 value

Button value can have up to 50 characters.

Button 2 title

Button title can have up to 50 characters.

Button 2 value

Button value can have up to 50 characters.

Button 3 title

Button title can have up to 50 characters.

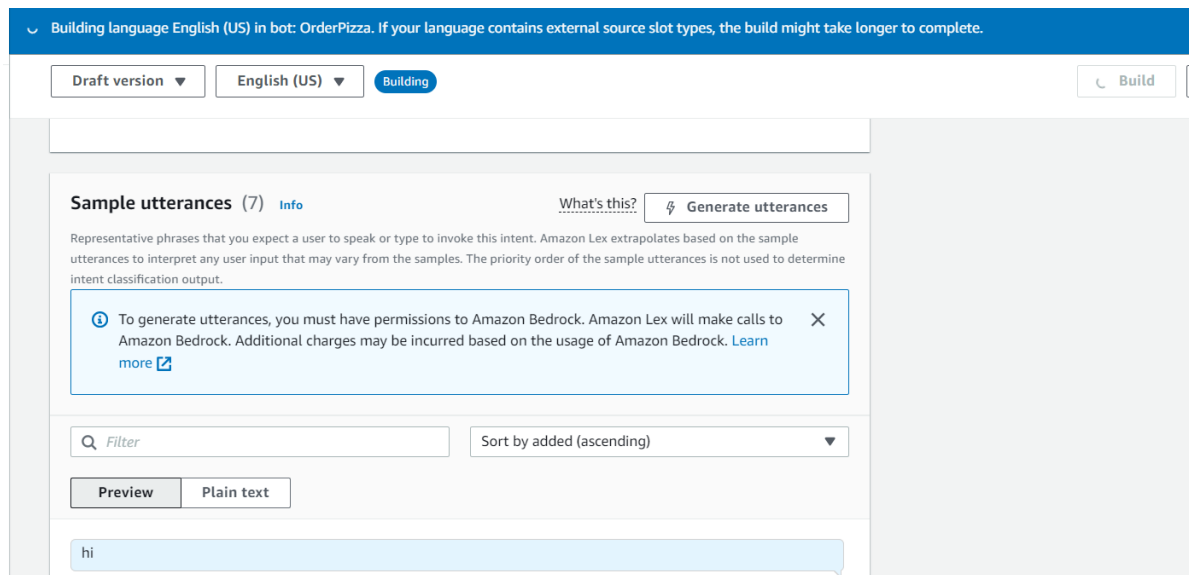
Button 3 value

Button value can have up to 50 characters.

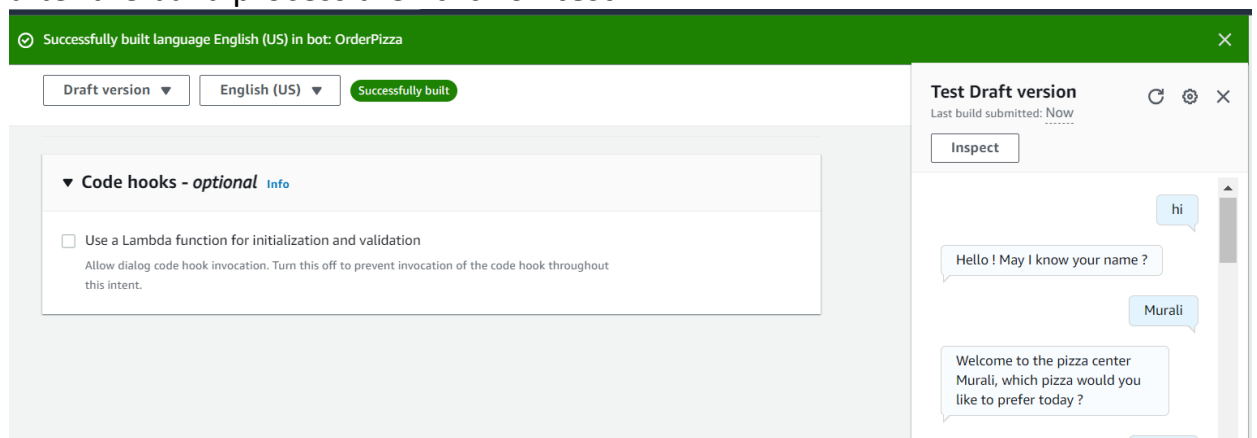
Add button

Cancel Update prompts

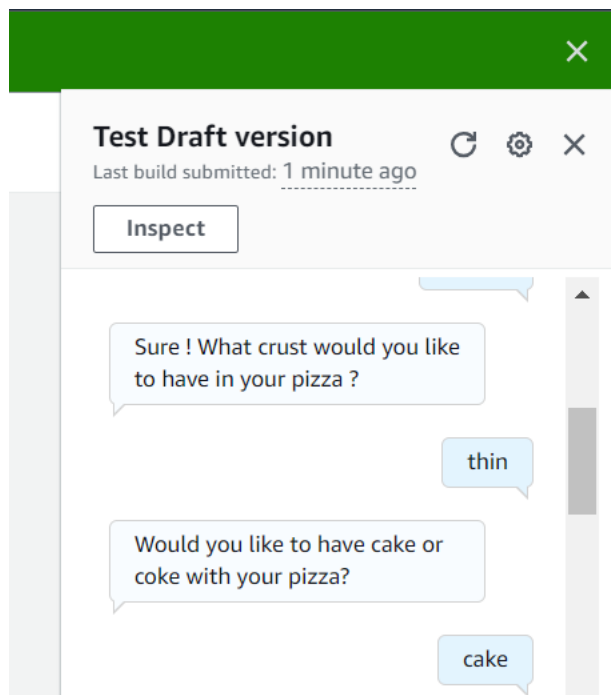
on the right corner you have build and test , first click on **build**

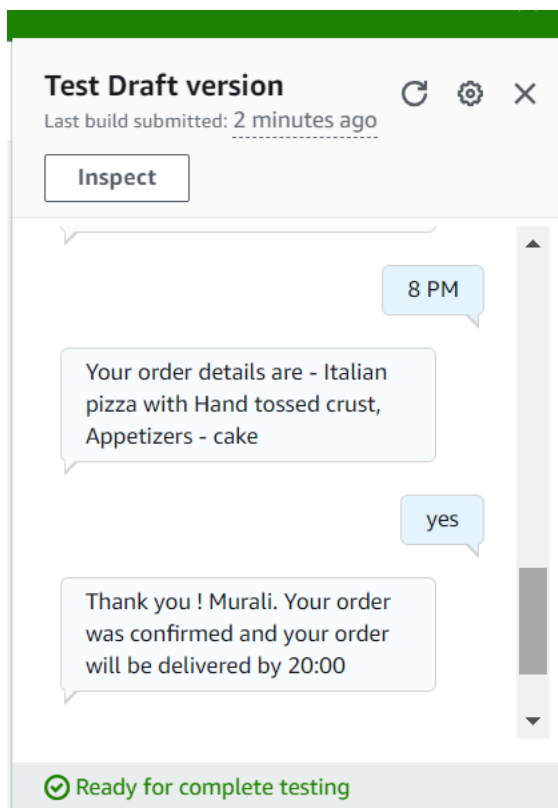
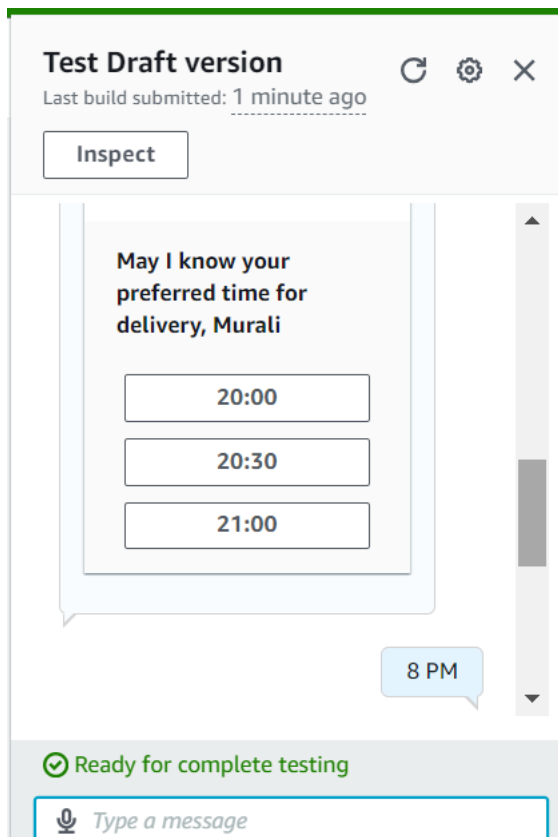


- after the build process then click on **test**



20.





21. If the chat bot is not responding accordingly there is no mistake in the steps you might have missed the steps create it once again , you may find the error not responding at the Initial stage create it once again and it will work.